

October 22d.

Dr. MORTON, President, in the Chair.

Mr. Richard C. Taylor presented the following meteorological observations made at the Isthmus of Panama, at Port Royal, Jamaica, and at sea, in October, 1849.

Table constructed from a few Meteorological Notes, chiefly in regard to the daily temperature at noon, on the east coast of the Isthmus of Panama, Port Royal, in Jamaica, and on the return voyage to New York; for the month of October, 1849.

By RICHARD C. TAYLOR.

Date.	Position.	Observations at noon.		
		Latitude.	Thermometer	Barometer.
Oct. 6	On shore, at Escribanos, Prov. Veragua.	9° 04'	82°	
7	do. do.	9 04	83	
8	Off shore,	9 04	86	
9	On shore at Chagres,	9 24	88	
10	do. do.	9 24	90	
11	do. do.	9 24	90	29° 70'
12	At anchor, one mile from Chagres,	9 24	88	29 70
15	do.	9 24	85	29 70
17	do.	9 24	92	29 50
18	Caribbean Sea,		88	29 50
19	do.		88	29 60
20	Port Royal, Jamaica,	18 00	85	29 20
21	do.	18 00	85	29 20
22	At sea, close under St. Domingo,	19 52	83	29 50
23	do. off Maraguana Island,	22 20	83	29 60
24	do.	26 26	78	29 50
25	do.	29 06	76	29 50
26	do.	34 25	72	30 10
27	do. off Cape Henlopen,	38 45	66	29 80
31	At New York,	40 42	43	

There appear to be some peculiarities, not readily accounted for, in the periods of Rainy and Dry seasons upon the Isthmus of Panama, at points which are not very far distant from each other, on the same coast.

Thus, the rainy season at Escribanos, in the Province of Veragua, we understand, is the reverse of that at Chagres, which place is situated at only sixty or seventy miles distance.

At Chagres, the *dry* season begins in December and ends in May, and the principal *rainy* months are those between May and November.

On the other hand, at Escribanos, the most *rainy* months are those which extend from November to the end of March. The inhabitants at this time are confined to their houses and have few opportunities of getting out of their doors. What is called the *dry* season in this vicinity, is from April to the end of October. Still, storms and showers occur almost daily in those months; and, in reference to the entire year at Escribanos, we remember the somewhat vague remark of the French Negro proprietor there—"it rains *every* time."

This constant progression of vast masses of vapor, of copious showers, and successive thunderstorms, along the mountainous but broken range of the Isthmus, appears to be chiefly from the equator, northward.

More than forty years ago, the celebrated Humboldt offered an explanation of the causes which occasioned the insupportable heat and dryness of the Old World, within the limits of the torrid zone, and the comparative coolness and continued humidity of the same parallel on the New Continent. These views are repeated in the same author's recent work on the "Aspects of Nature." I may be permitted to give the substance of them here.

In the sandy deserts of Africa, the vertically ascending column of warm air prevents the vesicles of vapor from being dissolved. The more complete the absence of vegetation and the more the sand is heated, the greater is the height of the clouds, and the less can any fall of rain take place. Thus, in deserts, the want of rain and the absence of vegetation, act and react upon each other. It does not rain, because the naked, sandy surface, having no vegetable covering, becomes more powerfully heated by the solar rays, and thus radiates more heat; and the absence of rain forbids the desert being converted into a steppe or grassy plain, because without water no organic development is possible.

On the contrary, in the New World, beneath the torrid zone, among other causes that tend to create a cooler and moister climate, are enumerated the impenetrable forests which occupy the alluvial plains which are situated immediately beneath the equator; protecting with their shade the soil beneath from the direct influence of the sun beams, and exhaling in the interior of the country, at a great distance from the mountains and from the ocean, vast quantities of moisture, partly imbibed and partly elaborated. It is to the same causes that we are to attribute the luxuriant vegetation, the magnificent forests, and that abundant leafiness by which the New Continent is peculiarly characterized.

Dr. Bridges presented a paper from Mr. James Deane, of Connecticut, on the "Fossil Foot-prints of Connecticut River," intended for publication in the Journal. Referred to Drs. Bridges, Wilson, and Leidy.

Dr. J. K. Townsend read a paper describing a new species of American Wolf, (*Lupus gigas*, Townsend, the giant wolf of N. America:) which, being intended for publication in the Journal, was referred to a committee, consisting of Drs. Hallowell, Wilson, and Morton. Dr. T. stated that the skin and skull of the animal described in his paper, were in the possession of the Academy, and would be mounted at an early period.

Mr. Cassin read a paper, entitled "Descriptions of new species of Birds collected by Mr. John G. Bell, in California." Referred to a committee, viz.; Drs. Wilson, Townsend, and Leidy.